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(54) METHOD AND APPARATUS FOR CLEANING
SEMICONDUCTOR WAFER

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(57) Abstract:

PURPOSE: To clean a wafer completely by employing an apparatus that includes a wafer table with a rotator for spinning a semiconductor wafer fixed on it, a device for spouting hot N_2 to dry the wafer, and a pressure reducer for keeping a cleaning chamber at low pressure.

CONSTITUTION: A wafer 3 is place on a table in a cleaning chamber 1. After the chamber is closed, it is evacuated by a pressure reducer 24. Then, N_2 gas 5 is supplied through a port 25 to keep the chamber at atmospheric pressure, and cleaning liquid 4 is supplied through a port 21. The cleaning liquid is discharged through an outlet 23, and pure water 5 containing no oxygen is supplied through a port 22 to replace the cleaning liquid. The pure water is discharged through the outlet 23. While the wafer 3 is spun by a rotator 26, hot N_2 gas from a gas source 20 is spouted over the wafer 3. During this process, the chamber is evacuated below atmospheric pressure by the pressure reducer 2 to dry the wafer surface and trenches. As a result, the wafer is completely cleaned.

